

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica St. Louis

13715 Rider Trail North

Earth City, MO 63045

Tel: (314)298-8566

TestAmerica Job ID: 160-5365-1

Client Project/Site: Glen Isle, Radiological Analyses

For:

Posillico Dev Company at Harbor Isle LLC

1750 New Highway

Farmingdale, New York 11735

Attn: Ellis Koch

Rhonda Ridenhower

Authorized for release by:

2/24/2014 10:38:29 AM

Rhonda Ridenhower, Manager of Project Management

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Job ID: 160-5365-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Posillico Dev Company at Harbor Isle LLC

Project: Glen Isle, Radiological Analyses

Report Number: 160-5365-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 01/31/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.1 C.

RADIUM 226 (0 DAY INGROWTH)-Waters

Sample FB011 (160-5365-2) was analyzed for radium 226 (0 day ingrowth) in accordance with EPA 903. The samples were prepared on 02/06/2014 and analyzed on 02/12/2014.

The samples were analyzed with no ingrowth, as such; the sample results may be biased high.

No other difficulties were encountered during the Radium 226 analysis.

All other quality control parameters were within the acceptance limits.

RADIUM-228 (GFPC)-Waters

Case Narrative

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Job ID: 160-5365-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Sample FB011 (160-5365-2) was analyzed for Radium-228 (GFPC) in accordance with EPA 904. The samples were prepared on 02/05/2014 and analyzed on 02/10/2014.

No difficulties were encountered during the Radium-228 analysis.

All quality control parameters were within the acceptance limits.

ISOTOPIC THORIUM (ALPHA SPECTROMETRY)-Solids

Samples LT-G-029-2-4 (160-5365-1) and DUP008 (160-5365-3) were analyzed for Isotopic Thorium (Alpha Spectrometry) in accordance with DOE A01R_Th. The samples were dried on 02/05/2014, prepared on 02/12/2014 and analyzed on 02/19/2014.

No difficulties were encountered during the Isotopic Thorium analysis.

All quality control parameters were within the acceptance limits.

ISOTOPIC THORIUM (ALPHA SPECTROMETRY)-Waters

Sample FB011 (160-5365-2) was analyzed for Isotopic Thorium (Alpha Spectrometry) in accordance with DOE. The samples were prepared on 02/12/2014 and analyzed on 02/18/2014.

No difficulties were encountered during the Isotopic Thorium analysis.

All quality control parameters were within the acceptance limits.

ISOTOPIC URANIUM (ALPHA SPECTROMETRY)-Solids

Samples LT-G-029-2-4 (160-5365-1) and DUP008 (160-5365-3) were analyzed for Isotopic Uranium (Alpha Spectrometry) in accordance with DOE. The samples were dried on 02/05/2014, prepared on 02/12/2014 and analyzed on 02/19/2014.

No difficulties were encountered during the Isotopic Uranium analysis.

All quality control parameters were within the acceptance limits.

ISOTOPIC URANIUM (ALPHA SPECTROMETRY)-Waters

Sample FB011 (160-5365-2) was analyzed for Isotopic Uranium (Alpha Spectrometry) in accordance with DOE. The samples were prepared on 02/12/2014 and analyzed on 02/14/2014.

No difficulties were encountered during the Isotopic Uranium analysis.

All quality control parameters were within the acceptance limits.

CESIUM-137 & OTHER GAMMA EMITTERS (GS)-Waters

Sample FB011 (160-5365-2) was analyzed for Cesium-137 & Other Gamma Emitters (GS) in accordance with DOE. The samples were prepared and analyzed on 02/03/2014.

The reporting limit was not met despite the activity being below the reporting limit. Protactinium-234 has an elevated MDC due to low abundance. The activity is not supported by thorium-234 or other members of the decay chain. The data is reported with the MDC achieved. (160-5365-2 DU), (MB 160-102830/1-A), FB011 (160-5365-2)

No other difficulties were encountered during the gamma spec analysis.

All other quality control parameters were within the acceptance limits.

RADIUM 226 (NO INGROWTH)-Solids

Samples LT-G-029-2-4 (160-5365-1) and DUP008 (160-5365-3) were analyzed for Radium 226 (No ingrowth) in accordance with GA-01-R. The samples were dried on 01/31/2014, prepared on 02/04/2014 and analyzed on 02/05/2014.

Radium-226 is quantified using the 186 keV line and matrix interference correction for Uranium-235. Doing this has the potential to

Case Narrative

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Job ID: 160-5365-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

produce a bias in the result. Evaluation of the Radium-226 result in correlation with the Lead- and Bismuth-214 results, on an individual sample basis is recommended.

The reporting limits for bismuth-212 and lead-210 analyzed by gamma spectroscopy were not met due to the presence of activity in the sample. The data is reported with the MDC achieved. (160-5365-3 DU), DUP008 (160-5365-3), LT-G-029-2-4 (160-5365-1)

Uranium-235 analyzed by gamma spectroscopy was detected above the MDC in the method blank but below the reporting limit. Variations in Compton backgrounds and statistical analyses allow for small area counts in the ROIs of this nuclide. Other decay chain products are not present in the blank to support the uranium-235 identification. The data is reported. (160-5365-3 DU), (LCS 160-103151/2-A), (MB 160-103151/1-A), DUP008 (160-5365-3), LT-G-029-2-4 (160-5365-1)

No other difficulties were encountered during the Gamma spec analysis.

All other quality control parameters were within the acceptance limits.

Chain of Custody Record

TestAmerica

Temperature on Receipt _____

Drinking Water? Yes No

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Address	Ellis Koch - RXR Business, LLC. 625 RXR Plaza			Project Manager Title	Derek Eshak			Date	1/28/14	Chain of Custody Number	270341			
City	Uniondale	State	NY	Zip Code	(631) 581-6353			Lab Number		Page	1 of 2			
Arranged Recipient						Site Contact			Analysis (Attach list if more space is needed)					
Carrier/Mailbill Number														
Project Name and Location (State) Contract/Purchase Order/Quote No.						Glen Isle Waterfront Redevelopment			Special Instructions/ Conditions of Receipt					
Sample I.D. No. and Description (Containers for each sample may be combined on one line)						Matrix			Containers & Preservatives					
						Date	Time	All	Sed	Aqueous	Supers			
LT- G-006-0-2						1/28/14	12:30	X	X	X	X			
LT- G-009-4-4						1/28/14	12:35	X	X	X	X			
LT- G-006-6-8						1/28/14	12:40	X	X	X	X			
LT- G-029-2-4						1/28/14	12:50	X	X	X	X			
LT- G-007-0-2						1/28/14	14:05	X	X	X	X			
LT- G-007-2-4						1/28/14	14:10	X	X	X	X			
LT- G-007-8-10						1/28/14	14:15	X	X	X	X			
FB011						1/28/14	13:00	X	X	X	X			
DUPO08						1/28/14	XXXXX	X	I	X	X			
DUPO10						1/28/14	XXXXX	X	2	X	X			
LT- G-008-6-2						1/28/14	14:50	X	2	X	X			
LT- G-028-2-4						1/28/14	14:55	X	2	X	X			
Possible Hazard Identification						Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months					
Turn Around Time Required						QC Requirements (Specify)								
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____						1. Received By _____			Date	1/29/14	Time	12:15		
						2. Relinquished By _____			Date	1/29/14	Time			
						3. Relinquished By _____			Date	1/30/14	Time	09:00		
									Comments			# 3 2C 4, 4, u, 1		

Login Sample Receipt Checklist

Client: Posillico Dev Company at Harbor Isle LLC

Job Number: 160-5365-1

Login Number: 5365

List Source: TestAmerica St. Louis

List Number: 1

Creator: Clarke, Jill C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Definitions/Glossary

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.
G	The Sample MDC is greater than the requested RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	TAL SL
904.0	Radium-228 (GFPC)	EPA	TAL SL
A-01-R	Isotopic Thorium (Alpha Spectrometry)	DOE	TAL SL
A-01-R	Isotopic Uranium (Alpha Spectrometry)	DOE	TAL SL
GA-01-R	Radium-226 & Other Gamma Emitters (GS)	DOE	TAL SL
GA-01-R	Cesium-137 & Other Gamma Emitters (GS)	DOE	TAL SL

Protocol References:

DOE = U.S. Department of Energy

EPA = US Environmental Protection Agency

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-5365-1	LT-G-029-2-4	Solid	01/28/14 12:50	01/31/14 09:10
160-5365-2	FB011	Water	01/28/14 13:00	01/31/14 09:10
160-5365-3	DUP008	Solid	01/28/14 00:00	01/31/14 09:10

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TestAmerica St. Louis

Client Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Client Sample ID: LT-G-029-2-4

Lab Sample ID: 160-5365-1

Matrix: Solid

Date Collected: 01/28/14 12:50

Date Received: 01/31/14 09:10

Method: A-01-R - Isotopic Thorium (Alpha Spectrometry)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Thorium-228	0.844		0.201	0.213	1.00	0.0672	pCi/g	02/12/14 10:27	02/19/14 21:11	1
Thorium-230	0.882		0.205	0.218	1.00	0.0614	pCi/g	02/12/14 10:27	02/19/14 21:11	1
Thorium-232	0.852		0.201	0.214	1.00	0.0663	pCi/g	02/12/14 10:27	02/19/14 21:11	1
Tracer	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Thorium-229	79.2		30 - 110					02/12/14 10:27	02/19/14 21:11	1

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Uranium-233/234	0.561		0.159	0.166	1.00	0.0633	pCi/g	02/12/14 10:27	02/19/14 21:17	1
Uranium-235/236	0.0225	U	0.0399	0.0399	1.00	0.0720	pCi/g	02/12/14 10:27	02/19/14 21:17	1
Uranium-238	0.516		0.153	0.159	1.00	0.0632	pCi/g	02/12/14 10:27	02/19/14 21:17	1
Tracer	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Uranium-232	82.9		30 - 110					02/12/14 10:27	02/19/14 21:17	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Actinium 228	1.18		0.0544	0.127	0.100	0.0404	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Bismuth-212	1.17		0.167	0.203	0.100	0.155	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Bismuth-214	0.832		0.0340	0.0878	0.100	0.0256	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Lead-210	0.891		0.156	0.194	0.100	0.207	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Lead-212	1.26		0.0247	0.192	0.100	0.0182	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Lead-214	0.930		0.0301	0.106	0.100	0.0264	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Potassium-40	20.4		0.391	2.00	2.50	0.131	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Protactinium-231	-0.398	U	0.235	0.240	1.00	0.382	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Radium-226	2.44		0.257	0.559	1.00	0.262	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Radium-228	1.18		0.0544	0.127	1.00	0.0404	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Thorium-234	1.06		0.216	0.240	1.00	0.266	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Thallium-208	0.393		0.0192	0.0428	0.100	0.0142	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Uranium-235	0.0953		0.0416	0.0426	1.00	0.0584	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Uranium-238	1.06		0.216	0.240	1.00	0.266	pCi/g	02/04/14 11:35	02/05/14 17:22	1
Protactinium-234m	2.58		1.26	1.29	10.0	1.38	pCi/g	02/04/14 11:35	02/05/14 17:22	1

Client Sample ID: FB011

Lab Sample ID: 160-5365-2

Matrix: Water

Date Collected: 01/28/14 13:00

Date Received: 01/31/14 09:10

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.136		0.0874	0.0883	1.00	0.122	pCi/L	02/06/14 13:39	02/12/14 18:32	1

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Client Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Client Sample ID: FB011

Lab Sample ID: 160-5365-2

Date Collected: 01/28/14 13:00

Matrix: Water

Date Received: 01/31/14 09:10

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.4		40 - 110	02/06/14 13:39	02/12/14 18:32	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Radium-228	0.108	U	0.179	0.180	1.00	0.304	pCi/L	02/05/14 14:41	02/10/14 11:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					02/05/14 14:41	02/10/14 11:44	1
Y Carrier	86.3		40 - 110					02/05/14 14:41	02/10/14 11:44	1

Method: A-01-R - Isotopic Thorium (Alpha Spectrometry)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Thorium-228	0.0345	U	0.0746	0.0746	1.00	0.138	pCi/L	02/12/14 12:32	02/18/14 21:01	1
Thorium-230	0.135		0.0808	0.0816	1.00	0.0725	pCi/L	02/12/14 12:32	02/18/14 21:01	1
Thorium-232	0.0128	U	0.0336	0.0336	1.00	0.0721	pCi/L	02/12/14 12:32	02/18/14 21:01	1
Tracer	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Thorium-229	78.2		30 - 110					02/12/14 12:32	02/18/14 21:01	1

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Uranium-233/234	0.0542	U	0.0745	0.0747	1.00	0.121	pCi/L	02/12/14 12:32	02/14/14 18:29	1
Uranium-235/236	0.0169	U	0.0464	0.0464	1.00	0.109	pCi/L	02/12/14 12:32	02/14/14 18:29	1
Uranium-238	0.0180	U	0.0361	0.0361	1.00	0.0541	pCi/L	02/12/14 12:32	02/14/14 18:29	1
Tracer	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Uranium-232	78.8		30 - 110					02/12/14 12:32	02/14/14 18:29	1

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Actinium-228	7.93	U	9.22	9.25	50.0	15.0	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Cesium-137	1.23	U	2.81	2.81	20.0	4.78	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Bismuth-212	23.0	U G	32.8	32.8	50.0	54.5	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Bismuth-214	-6.75	U	19.6	19.6	50.0	12.3	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Lead-212	1.31	U	4.74	4.74	50.0	7.39	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Lead-214	3.80	U	4.54	4.56	50.0	7.96	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Potassium-40	-62.0	U G	168	169	75.0	83.3	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Protactinium-234m	85.4	U G	197	197	75.0	775	pCi/L	02/03/14 12:23	02/03/14 15:32	1
Protactinium-231	43.0	U G	56.2	56.4	75.0	92.8	pCi/L	02/03/14 12:23	02/03/14 15:32	1

TestAmerica St. Louis

Client Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Client Sample ID: DUP008

Lab Sample ID: 160-5365-3

Matrix: Solid

Date Collected: 01/28/14 00:00

Date Received: 01/31/14 09:10

Method: A-01-R - Isotopic Thorium (Alpha Spectrometry)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Thorium-228	0.767		0.192	0.202	1.00	0.103	pCi/g	02/12/14 10:27	02/19/14 21:11	1
Thorium-230	0.527		0.157	0.163	1.00	0.0739	pCi/g	02/12/14 10:27	02/19/14 21:11	1
Thorium-232	0.428		0.140	0.145	1.00	0.0591	pCi/g	02/12/14 10:27	02/19/14 21:11	1
Tracer	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Thorium-229	81.4		30 - 110					02/12/14 10:27	02/19/14 21:11	1

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Uranium-233/234	0.710		0.185	0.195	1.00	0.0867	pCi/g	02/12/14 10:27	02/19/14 21:17	1
Uranium-235/236	0.0210	U	0.0424	0.0424	1.00	0.0831	pCi/g	02/12/14 10:27	02/19/14 21:17	1
Uranium-238	0.735		0.186	0.196	1.00	0.0533	pCi/g	02/12/14 10:27	02/19/14 21:17	1
Tracer	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Uranium-232	79.1		30 - 110					02/12/14 10:27	02/19/14 21:17	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Actinium 228	0.852		0.0397	0.0956	0.100	0.0392	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Bismuth-212	0.971		0.125	0.160	0.100	0.117	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Bismuth-214	0.644		0.0346	0.0753	0.100	0.0264	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Lead-210	0.743		0.172	0.193	0.100	0.214	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Lead-212	0.934		0.0208	0.123	0.100	0.0180	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Lead-214	0.696		0.0258	0.0768	0.100	0.0230	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Potassium-40	14.8		0.334	1.55	2.50	0.117	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Protactinium-231	-0.349	U	0.209	0.212	1.00	0.339	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Radium-226	1.65		0.225	0.366	1.00	0.241	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Radium-228	0.852		0.0397	0.0956	1.00	0.0392	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Thorium-234	0.805		0.205	0.221	1.00	0.248	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Thallium-208	0.315		0.0164	0.0366	0.100	0.0124	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Uranium-235	0.0803		0.0316	0.0326	1.00	0.0507	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Uranium-238	0.805		0.205	0.221	1.00	0.248	pCi/g	02/04/14 11:35	02/05/14 17:23	1
Protactinium-234m	2.26		1.37	1.39	10.0	1.47	pCi/g	02/04/14 11:35	02/05/14 17:23	1

TestAmerica St. Louis

QC Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-103475/1-A

Matrix: Water

Analysis Batch: 104233

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103475

Analyte	MB MB		Count (2σ+/-)	Total (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-226	0.06645	U	0.0933	0.0935	1.00	0.158	pCi/L	02/06/14 13:39	02/11/14 18:57	1
Carrier										
Ba Carrier	92.0			40 - 110				02/06/14 13:39	02/11/14 18:57	1

Lab Sample ID: LCS 160-103475/2-A

Matrix: Water

Analysis Batch: 104233

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103475

Analyte	Spike		LCS Result	LCS Qual	Total		RL	MDC	Unit	%Rec.
	Added	Uncert.			Uncert. (2σ+/-)	%Rec.				
Radium-226	11.2		12.54		1.31	112	1.00	0.122	pCi/L	68 - 137
Carrier										
Ba Carrier	91.4			40 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-103312/1-A

Matrix: Water

Analysis Batch: 103897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103312

Analyte	MB MB		Count (2σ+/-)	Total (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	-0.05795	U	0.160	0.160	1.00	0.300	pCi/L	02/05/14 14:41	02/10/14 11:42	1
Carrier										
Ba Carrier	104			40 - 110				02/05/14 14:41	02/10/14 11:42	1
Y Carrier	89.6			40 - 110				02/05/14 14:41	02/10/14 11:42	1

Lab Sample ID: LCS 160-103312/2-A

Matrix: Water

Analysis Batch: 103897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103312

Analyte	Spike		LCS Result	LCS Qual	Total		RL	MDC	Unit	%Rec.
	Added	Uncert.			Uncert. (2σ+/-)	%Rec.				
Radium-228	3.98		3.310		0.508	83	1.00	0.353	pCi/L	56 - 140
Carrier										
Ba Carrier	98.8			40 - 110						
Y Carrier	87.1			40 - 110						

TestAmerica St. Louis

QC Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method: A-01-R - Isotopic Thorium (Alpha Spectrometry)

Lab Sample ID: MB 160-104496/1-A

Matrix: Solid

Analysis Batch: 106221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 104496

Analyte	MB MB		Uncert.	Total		RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier		(2σ+/-)	(2σ+/-)						
Thorium-228	0.04611	U	0.0612	0.0613	1.00	0.101	pCi/g	02/12/14 10:27	02/19/14 21:11	1	
Thorium-230	0.06597	U	0.0598	0.0601	1.00	0.0787	pCi/g	02/12/14 10:27	02/19/14 21:11	1	
Thorium-232	-0.003879	U	0.00549	0.00550	1.00	0.0537	pCi/g	02/12/14 10:27	02/19/14 21:11	1	
Tracer	MB MB		Limits			RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Thorium-229	87.9			30 - 110							

Lab Sample ID: LCS 160-104496/2-A

Matrix: Solid

Analysis Batch: 106245

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 104496

Analyte	Spike		LCS	LCS	Total		RL	MDC	Unit	%Rec.	Limits
	Added	Result	Qual	Uncert.	(2σ+/-)	(2σ+/-)					
Thorium-230	24.5	28.10		2.89	1.00	0.233	pCi/g	115	81 - 118		
Tracer	LCS LCS		Limits								
Thorium-229	76.0			30 - 110							

Lab Sample ID: MB 160-104514/1-A

Matrix: Water

Analysis Batch: 105555

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 104514

Analyte	MB MB		Uncert.	Total		RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier		(2σ+/-)	(2σ+/-)						
Thorium-228	0.08048	U	0.0818	0.0821	1.00	0.127	pCi/L	02/12/14 12:32	02/17/14 19:51	1	
Thorium-230	0.1357		0.0727	0.0736	1.00	0.0292	pCi/L	02/12/14 12:32	02/17/14 19:51	1	
Thorium-232	0.001208	U	0.0164	0.0164	1.00	0.0535	pCi/L	02/12/14 12:32	02/17/14 19:51	1	
Tracer	MB MB		Limits								
Thorium-229	85.6			30 - 110							

Lab Sample ID: LCS 160-104514/2-A

Matrix: Water

Analysis Batch: 105556

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 104514

Analyte	Spike		LCS	LCS	Total		RL	MDC	Unit	%Rec.	Limits
	Added	Result	Qual	Uncert.	(2σ+/-)	(2σ+/-)					
Thorium-230	8.64	9.391		1.01	1.00	0.0705	pCi/L	109	81 - 125		
Tracer	LCS LCS		Limits								
Thorium-229	77.8			30 - 110							

TestAmerica St. Louis

QC Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Lab Sample ID: MB 160-104497/1-A

Matrix: Solid

Analysis Batch: 106156

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 104497

Analyte	Result	MB	MB	Count		Total		MDC	Unit	Prepared	Analyzed	Dil Fac	
				Uncert.	(2σ+/-)	Uncert.	(2σ+/-)						
Uranium-233/234	0.06962			0.0577		0.0579		1.00	pCi/g	02/12/14 10:27	02/19/14 21:16	1	
Uranium-235/236	0.0000	U		0.00505		0.00505		1.00	pCi/g	02/12/14 10:27	02/19/14 21:16	1	
Uranium-238	0.06071			0.0532		0.0534		1.00	pCi/g	02/12/14 10:27	02/19/14 21:16	1	
Tracer	%Yield	MB	MB	Spike	LCS	LCS	Total			Prepared	Analyzed	Dil Fac	
Uranium-232	85.9			Added	Result	Qual	Uncert.	RL	MDC	Unit	02/12/14 10:27	02/19/14 21:16	1
							(2σ+/-)						
								30 - 110					

Lab Sample ID: LCS 160-104497/2-A

Matrix: Solid

Analysis Batch: 106157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 104497

Analyte	Result	MB	MB	Spike		LCS		Total		%Rec.	Limits	
				Added	Result	Qual	Uncert.	(2σ+/-)	RL	MDC	Unit	
Uranium-233/234	6.37				6.448			0.768	1.00	0.0524	pCi/g	101
Uranium-238	6.51				6.184			0.744	1.00	0.0345	pCi/g	95
Tracer	%Yield	MB	MB	Spike	LCS	LCS	Uncert.	(2σ+/-)	RL	MDC	Unit	%Rec
Uranium-232	82.3			Added	Result	Qual	(2σ+/-)					84 - 120
								30 - 110				

Lab Sample ID: MB 160-104516/1-A

Matrix: Water

Analysis Batch: 105408

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 104516

Analyte	Result	MB	MB	Count		Total		MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert.	(2σ+/-)	Uncert.	(2σ+/-)					
Uranium-233/234	0.008228		U	0.0349		0.0349		1.00	pCi/L	02/12/14 12:32	02/14/14 18:29	1
Uranium-235/236	0.01024		U	0.0434		0.0435		1.00	pCi/L	02/12/14 12:32	02/14/14 18:29	1
Uranium-238	0.0000	U		0.00821		0.00821		1.00	pCi/L	02/12/14 12:32	02/14/14 18:29	1
Tracer	%Yield	MB	MB	Spike	LCS	LCS	Uncert.	(2σ+/-)	RL	MDC	Unit	Dil Fac
Uranium-232	84.3			Added	Result	Qual	(2σ+/-)					1
								30 - 110				

Lab Sample ID: LCS 160-104516/2-A

Matrix: Water

Analysis Batch: 105409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 104516

Analyte	Result	MB	MB	Spike		LCS		Total		%Rec.	Limits	
				Added	Result	Qual	Uncert.	(2σ+/-)	RL	MDC	Unit	
Uranium-233/234	12.7				12.83			1.43	1.00	0.105	pCi/L	101
Uranium-238	13.0				12.66			1.41	1.00	0.0949	pCi/L	97
Tracer	%Yield	MB	MB	Spike	LCS	LCS	Uncert.	(2σ+/-)	RL	MDC	Unit	Dil Fac
Uranium-232	81.8			Added	Result	Qual	(2σ+/-)					1
								30 - 110				

TestAmerica St. Louis

QC Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method: GA-01-R - Cesium-137 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-102830/1-A

Matrix: Water

Analysis Batch: 102879

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 102830

Analyte	Result	MB	MB	Count		Total		Prepared	Analyzed	Dil Fac
				Uncert.	(2σ+/-)	Uncert.	(2σ+/-)			
Actinium-228	4.266	U		7.64		7.65	50.0	14.9 pCi/L	02/03/14 12:23	02/03/14 16:27
Cesium-137	1.253	U		2.42		2.42	20.0	4.08 pCi/L	02/03/14 12:23	02/03/14 16:27
Bismuth-212	14.26	U		29.0		29.0	50.0	49.0 pCi/L	02/03/14 12:23	02/03/14 16:27
Bismuth-214	-4.361	U		11.3		11.3	50.0	10.9 pCi/L	02/03/14 12:23	02/03/14 16:27
Lead-212	1.946	U		3.88		3.89	50.0	6.66 pCi/L	02/03/14 12:23	02/03/14 16:27
Lead-214	-0.3544	U		6.66		6.66	50.0	9.67 pCi/L	02/03/14 12:23	02/03/14 16:27
Potassium-40	-36.92	U		75.1		75.2	75.0	68.3 pCi/L	02/03/14 12:23	02/03/14 16:27
Protactinium-234m	172.2	U G		254		255	75.0	424 pCi/L	02/03/14 12:23	02/03/14 16:27
Protactinium-231	-12.30	U G		64.5		64.5	75.0	110 pCi/L	02/03/14 12:23	02/03/14 16:27

Lab Sample ID: LCS 160-102830/2-A

Matrix: Water

Analysis Batch: 103332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 102830

Analyte	Spike	Added	LCS	LCS	Total			%Rec.	Limits	
					Result	Qual	Uncert.			
Americium-241		137000		133000			15400		475 pCi/L	97 90 - 111
Cesium-137		50400		49310			4940	20.0	156 pCi/L	98 90 - 111
Cobalt-60		59300		57060			5640		120 pCi/L	96 89 - 110

Lab Sample ID: 160-5365-2 DU

Matrix: Water

Analysis Batch: 102876

Client Sample ID: FB011

Prep Type: Total/NA

Prep Batch: 102830

Analyte	Sample	Sample	DU	DU	Total			RER	Limit							
					Result	Qual	Result	Qual	Uncert.	(2σ+/-)	RL	MDC	Unit			
Actinium-228	7.93	U			6.573	U			5.80		50.0	12.4 pCi/L			0.09	1
Cesium-137	1.23	U			0.4787	U			2.14		20.0	3.68 pCi/L			0.15	1
Bismuth-212	23.0	U G			14.64	U			27.9		50.0	46.8 pCi/L			0.14	1
Bismuth-214	-6.75	U			1.876	U			7.86		50.0	10.4 pCi/L			0.31	1
Lead-212	1.31	U			-1.257	U			5.55		50.0	7.47 pCi/L			0.25	1
Lead-214	3.80	U			-3.641	U			10.1		50.0	9.41 pCi/L			0.51	1
Potassium-40	-62.0	U G			35.96	U			38.3		75.0	54.1 pCi/L			0.47	1
Protactinium-234m	85.4	U G			-291.1	U G			804		75.0	567 pCi/L			0.38	1
Protactinium-231	43.0	U G			20.60	U G			46.8		75.0	101 pCi/L			0.22	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-103151/1-A

Matrix: Solid

Analysis Batch: 103329

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103151

Analyte	MB	MB	Count		Total		Prepared	Analyzed	Dil Fac					
			Result	Qualifier	Uncert.	(2σ+/-)	RL	MDC	Unit					
Actinium 228	0.009104	U			0.00649		0.00656	0.100	0.0112 pCi/g		02/04/14 11:35	02/05/14 17:20		1
Bismuth-212	0.01444	U			0.0197		0.0198	0.100	0.0327 pCi/g		02/04/14 11:35	02/05/14 17:20		1
Bismuth-214	0.0006902	U			0.00150		0.00150	0.100	0.0101 pCi/g		02/04/14 11:35	02/05/14 17:20		1

TestAmerica St. Louis

QC Sample Results

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS) (Continued)

Lab Sample ID: MB 160-103151/1-A

Matrix: Solid

Analysis Batch: 103329

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103151

Analyte	Result	MB	MB	Count		Total		Prepared	Analyzed	Dil Fac
				Uncert.	(2σ+/-)	Uncert.	(2σ+/-)			
Lead-210	0.01563	U		0.0636	0.0636	0.100	0.0930	pCi/g	02/04/14 11:35	02/05/14 17:20
Lead-212	-0.0009042	U		0.00433	0.00433	0.100	0.00620	pCi/g	02/04/14 11:35	02/05/14 17:20
Lead-214	-0.001663	U		0.00567	0.00567	0.100	0.00876	pCi/g	02/04/14 11:35	02/05/14 17:20
Potassium-40	0.003950	U		0.0221	0.0221	2.50	0.0479	pCi/g	02/04/14 11:35	02/05/14 17:20
Protactinium-231	0.008435	U		0.00926	0.00931	1.00	0.0974	pCi/g	02/04/14 11:35	02/05/14 17:20
Radium-226	0.04345	U		0.0553	0.0558	1.00	0.0773	pCi/g	02/04/14 11:35	02/05/14 17:20
Radium-228	0.009104	U		0.00649	0.00656	1.00	0.0112	pCi/g	02/04/14 11:35	02/05/14 17:20
Thorium-234	0.03490	U		0.0500	0.0502	1.00	0.0713	pCi/g	02/04/14 11:35	02/05/14 17:20
Thallium-208	0.001491	U		0.00188	0.00189	0.100	0.00408	pCi/g	02/04/14 11:35	02/05/14 17:20
Uranium-235	0.01620			0.0111	0.0113	1.00	0.0125	pCi/g	02/04/14 11:35	02/05/14 17:20
Uranium-238	0.03490	U		0.0500	0.0502	1.00	0.0713	pCi/g	02/04/14 11:35	02/05/14 17:20
Protactinium-234m	-0.2817	U		0.801	0.802	10.0	0.550	pCi/g	02/04/14 11:35	02/05/14 17:20

Lab Sample ID: LCS 160-103151/2-A

Matrix: Solid

Analysis Batch: 103337

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103151

Analyte	Spike Added	LCS		Total		RL	MDC	Unit	%Rec	Limits
		Result	Qual	Uncert.	(2σ+/-)					
Americium-241	101	101.6		10.6			0.510	pCi/g	101	87 - 116
Cesium-137	35.8	35.62		3.73		0.100	0.194	pCi/g	99	87 - 120
Cobalt-60	42.1	40.98		4.13			0.123	pCi/g	97	87 - 115

Lab Sample ID: 160-5365-3 DU

Matrix: Solid

Analysis Batch: 103403

Client Sample ID: DUP008

Prep Type: Total/NA

Prep Batch: 103151

Analyte	Sample		DU		Total		RL	MDC	Unit	RER	Limit
	Result	Qual	Result	Qual	Uncert.	(2σ+/-)					
Actinium 228	0.852			0.9402		0.106	0.100	0.0412	pCi/g	0.44	1
Bismuth-212	0.971			1.046		0.223	0.100	0.166	pCi/g	0.20	1
Bismuth-214	0.644			0.6875		0.0787	0.100	0.0241	pCi/g	0.29	1
Lead-210	0.743			0.6893		0.176	0.100	0.212	pCi/g	0.14	1
Lead-212	0.934			1.010		0.132	0.100	0.0177	pCi/g	0.30	1
Lead-214	0.696			0.7520		0.0829	0.100	0.0234	pCi/g	0.35	1
Potassium-40	14.8			15.44		1.62	2.50	0.125	pCi/g	0.20	1
Protactinium-231	-0.349	U		-0.2448	U	0.207	1.00	0.336	pCi/g	0.25	1
Radium-226	1.65			1.804		0.393	1.00	0.249	pCi/g	0.20	1
Radium-228	0.852			0.9402		0.106	1.00	0.0412	pCi/g	0.44	1
Thorium-234	0.805			0.7137		0.122	1.00	0.255	pCi/g	0.27	1
Thallium-208	0.315			0.3116		0.0356	0.100	0.0119	pCi/g	0.05	1
Uranium-235	0.0803			0.08139		0.0381	1.00	0.0509	pCi/g	0.02	1
Uranium-238	0.805			0.7137		0.122	1.00	0.255	pCi/g	0.27	1
Protactinium-234	2.26			2.426		1.61	10.0	1.53	pCi/g	0.05	1
m											

TestAmerica St. Louis

QC Association Summary

Client: Posillico Dev Company at Harbor Isle LLC
 Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Rad

Leach Batch: 102647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-1	LT-G-029-2-4	Total/NA	Solid	Dry and Grind	
160-5365-3	DUP008	Total/NA	Solid	Dry and Grind	
160-5365-3 DU	DUP008	Total/NA	Solid	Dry and Grind	

Prep Batch: 102830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-2	FB011	Total/NA	Water	Fill_Geo-0	
160-5365-2 DU	FB011	Total/NA	Water	Fill_Geo-0	
LCS 160-102830/2-A	Lab Control Sample	Total/NA	Water	Fill_Geo-0	
MB 160-102830/1-A	Method Blank	Total/NA	Water	Fill_Geo-0	

Prep Batch: 103151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-1	LT-G-029-2-4	Total/NA	Solid	Fill_Geo-0	102647
160-5365-3	DUP008	Total/NA	Solid	Fill_Geo-0	102647
160-5365-3 DU	DUP008	Total/NA	Solid	Fill_Geo-0	102647
LCS 160-103151/2-A	Lab Control Sample	Total/NA	Solid	Fill_Geo-0	
MB 160-103151/1-A	Method Blank	Total/NA	Solid	Fill_Geo-0	

Leach Batch: 103302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-1	LT-G-029-2-4	Total/NA	Solid	Dry and Grind	
160-5365-3	DUP008	Total/NA	Solid	Dry and Grind	

Prep Batch: 103312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-2	FB011	Total/NA	Water	PrecSep_0	
LCS 160-103312/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
MB 160-103312/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Prep Batch: 103475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-2	FB011	Total/NA	Water	PrecSep_0	
LCS 160-103475/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
MB 160-103475/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Prep Batch: 104496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-1	LT-G-029-2-4	Total/NA	Solid	ExtChrom	103302
160-5365-3	DUP008	Total/NA	Solid	ExtChrom	103302
LCS 160-104496/2-A	Lab Control Sample	Total/NA	Solid	ExtChrom	
MB 160-104496/1-A	Method Blank	Total/NA	Solid	ExtChrom	

Prep Batch: 104497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-1	LT-G-029-2-4	Total/NA	Solid	ExtChrom	103302
160-5365-3	DUP008	Total/NA	Solid	ExtChrom	103302
LCS 160-104497/2-A	Lab Control Sample	Total/NA	Solid	ExtChrom	
MB 160-104497/1-A	Method Blank	Total/NA	Solid	ExtChrom	

TestAmerica St. Louis

QC Association Summary

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Rad (Continued)

Prep Batch: 104514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-2	FB011	Total/NA	Water	ExtChrom	5
LCS 160-104514/2-A	Lab Control Sample	Total/NA	Water	ExtChrom	6
MB 160-104514/1-A	Method Blank	Total/NA	Water	ExtChrom	7

Prep Batch: 104516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-5365-2	FB011	Total/NA	Water	ExtChrom	8
LCS 160-104516/2-A	Lab Control Sample	Total/NA	Water	ExtChrom	9
MB 160-104516/1-A	Method Blank	Total/NA	Water	ExtChrom	10

Tracer/Carrier Summary

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)
160-5365-2	FB011	89.4
LCS 160-103475/2-A	Lab Control Sample	91.4
MB 160-103475/1-A	Method Blank	92.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
160-5365-2	FB011	106	86.3
LCS 160-103312/2-A	Lab Control Sample	98.8	87.1
MB 160-103312/1-A	Method Blank	104	89.6

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: A-01-R - Isotopic Thorium (Alpha Spectrometry)

Matrix: Solid

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Th-229 (30-110)
160-5365-1	LT-G-029-2-4	79.2
160-5365-3	DUP008	81.4
LCS 160-104496/2-A	Lab Control Sample	76.0
MB 160-104496/1-A	Method Blank	87.9

Tracer/Carrier Legend

Th-229 = Thorium-229

Method: A-01-R - Isotopic Thorium (Alpha Spectrometry)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Th-229 (30-110)
160-5365-2	FB011	78.2
LCS 160-104514/2-A	Lab Control Sample	77.8
MB 160-104514/1-A	Method Blank	85.6

Tracer/Carrier Legend

Th-229 = Thorium-229

TestAmerica St. Louis

Tracer/Carrier Summary

Client: Posillico Dev Company at Harbor Isle LLC
Project/Site: Glen Isle, Radiological Analyses

TestAmerica Job ID: 160-5365-1

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Matrix: Solid

Prep Type: Total/NA

Tracer/Carrier Legend

U-232 = Uranium-232

Method: A-01-R - Isotopic Uranium (Alpha Spectrometry)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)		
U-232		
Lab Sample ID	Client Sample ID	(30-110)
160-5365-2	FB011	78.8
LCS 160-104516/2-A	Lab Control Sample	81.8
MB 160-104516/1-A	Method Blank	84.3

Tracer/Carrier Legend

U-232 = Uranium-232